PLINIUS

M8

Stereo Preamplifier

INSTRUCTION MANUAL

REFINED AUDIO EQUIPMENT

MANUFACTURED WITH PRIDE IN NEW ZEALAND

CONGRATULATIONS on your decision to become the proud owner of this Plinius M8 Preamplifier.

This manual has been prepared to help you understand the operation of your amplifier, and to provide information about its design and the variety of ways it may be used.

We have designed and manufactured this preamplifier to reproduce your favourite music faithfully and accurately. With a little care and a full understanding of the operating recommendations in this manual, your Plinius M8 Preamplifier will provide years of high-quality, trouble-free performance.

Serial Number: .....

Date of Manufacture: .....

Final Test Certified By: .....

IMPORTANT: **PLEASE TAKE THE TIME TO READ THIS MANUAL THOROUGHLY BEFORE USING YOUR PREAMPLIFIER.**

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PRECAUTIONS

Please take special note of the following precautions before operating your new preamplifier:

- This preamplifier operates at hazardous voltage levels. We recommend that any work requiring removal of the lid be referred to a suitably qualified and experienced service technician.

- DO NOT attempt to connect any input of this preamplifier to its own outputs.

- DO NOT earth any output terminal or connect any of these terminals together without following the instructions in this manual or seeking qualified assistance.

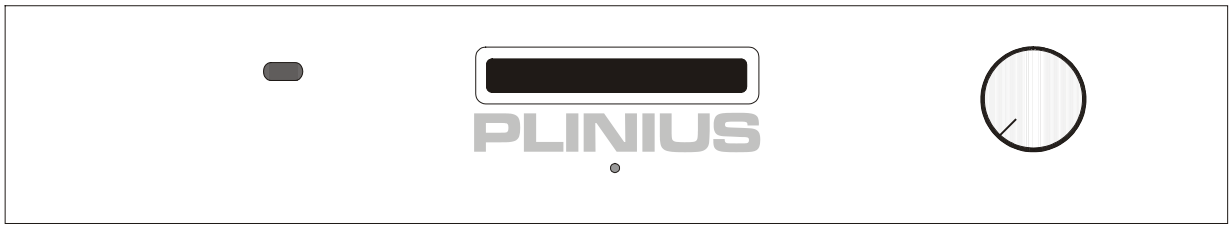
- DO NOT place this preamplifier in any position where liquids or any foreign material may accidentally enter it.

- DO NOT connect any voltage source, short circuit, earth/ground or appliance (other than suitable audio power amplifiers) to the preamplifier output terminals.

- DO NOT connect any voltage source, short circuit, earth/ground or appliance (other than suitable audio source components) to the preamplifier input terminals.

PREAMPLIFIER FEATURES – FRONT PANEL

The front of the Plinius M8 Preamplifier.



Front Panel Layout Showing Volume Knob, Vacuum Fluorescent Display, And Display LED

DISPLAY LED

An LED below 'PLINIUS' indicates when the preamplifier is in standby mode. This LED also lights to show whenever the remote control is being used to change the volume level.

VACUUM FLUORESCENT DISPLAY

Whenever a modification is made to the M8 settings (via the remote control) these changes will be viewable on the display.

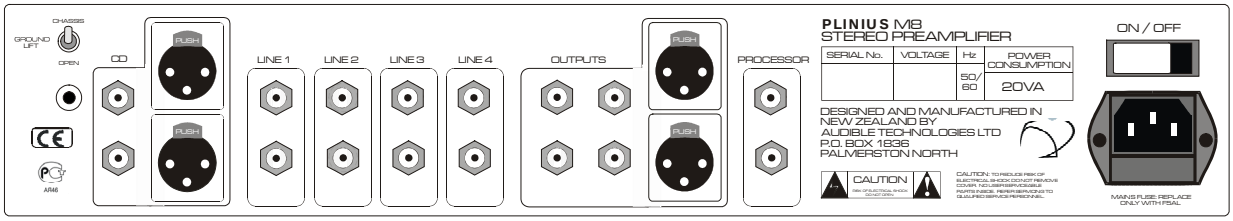
VOLUME CONTROL KNOB

The volume control is an ALPS motorised unit that will accurately convey the selected source signal to the line stage of the Plinius M8. When using the remote control to alter the volume level, briefly press the button to make small adjustments, or hold the button down to continuously adjust the volume.

PREAMPLIFIER FEATURES – REAR PANEL

This panel incorporates all the terminals for connecting the input signals from your CD player, tuner, etc, and the outputs to the power amp and mains supply.

Please remember that your Plinius M8 Preamplifier is a high quality electronic instrument capable of an exceptional level of performance. Be sure that you understand your system's requirements fully before you make any connection to this preamplifier.



Rear Panel Showing Input And Output Terminals, Ground Lift Switch, Mains Switch And Mains Socket.

INPUT TERMINALS

The input terminals of your Plinius M8 Preamplifier are easily accessible along the rear panel. These standard RCA terminals are for use with single ended signals from line level audio components such as CD, tuner, surround processor, VCR, etc. Also included is one pair of balanced XLR inputs for use with XLR type cables. Consult your **PLINIUS** dealer for further advice if required.

OUTPUT TERMINALS

Connections for power amplifiers are provided in the centre of the rear panel. Connections are available for both single ended (RCA type) and balanced (XLR type) cables. Note that the only time the outputs aren't 'live' is when the preamplifier is in mute or standby.

PROCESSOR INPUT

This input is for use specifically with home theatre processors. In some circumstances you may wish to use the power amplifier and speakers that the M8 is connected to as the front two channels of a surround or home theatre environment. The processor input can be used for this purpose, as any signal connected to the processor inputs can be sent directly to the power amplifier bypassing the M8 entirely.

GROUND LIFT SWITCH

This switch allows the signal ground to be disconnected from the chassis. In some installations a hum loop may exist due to duplicate ground paths from different equipment. Use this switch to remove the connection from 0V to ground thus allowing some flexibility in your particular set-up.

MAINS SWITCH

The heavy-duty rocker switch to the right of the panel turns the Mains/Line Power to the amplifier ON or OFF. The amplifier draws a moderately high current when switched on, so it is not good practice to rapidly turn the Mains switch on and off repeatedly.

MAINS POWER CORD IEC SOCKET

This connector is where the mains supply cable from your wall connects to the preamplifier. A fuse holder is mounted within this connection, and it holds a mains fuse to provide surge and overload protection for your preamplifier.

EARTH POST

This is a chassis connected gold-plated earth post for use with most vinyl turntables.

PREAMPLIFIER FEATURES – REMOTE

VOLUME CONTROL

Use these two buttons to control the volume level of the preamplifier. The right side button increases volume, while the left side button decreases the volume. Briefly press either button to make fine adjustments to the volume level. Hold down either button to continually adjust the volume level.

MUTE

Pressing this button toggles the Plinius M8 in and out of mute.

PHASE

The phase of the input signal to the preamplifier is toggle from absolute to inverted 180° with each press of this button.

STANDBY

Standby disconnects the outputs of the preamplifier and turns off the vacuum fluorescent display tube. It is recommended that whenever the Plinius M8 is left switched on but not in use, the standby function be activated to increase the life of the display tube.

DISPLAY

The display button on the remote enables you to quickly adjust the display brightness to either off or the user set brightness level. If depressed once and the display brightness falls to zero, another press and the display reverts to the current user preset level. This user level is set using the menu buttons on the remote as described later in the 'Settings Menu Structure' section. Note that if the brightness is set to zero, any button press will bring the brightness back to the current user setting so the screen can be read.

SOURCE SELECTION

The source selection buttons enable changing from one input to another when needed – either CD, Line 1, Line 2, Line 3, or Line 4.

MENU ACCESS BUTTONS

The three buttons labelled Menu and Enter are used to set the M8 menu items. Use the Enter button to access the menu, then the Up and Down buttons in conjunction with Enter to change settings as desired (see the settings menu structure section following).

PROCESSOR INPUT SELECTION

Press the Processor button to activate the processor bypass function, allowing a home theatre system to directly access the front left and right channels of your system. The display will confirm selection of the processor input by displaying 'Proc' for 3 seconds, after which the display reads 'Processor'. At this time standby, display and source are the only buttons that still function. To deselect the processor input press any other source button on the remote control. Note that the processor input only works with the single ended outputs – the balanced XLR outputs are not live when in processor mode.

INSTALLATION AND OPERATION

PLACEMENT AND VENTILATION

Ventilation through and around your Plinius M8 Preamplifier should be kept unimpeded, so ensure that the heat vents (slots in the lid and base) are not covered or restricted in any way.

The Plinius M8 design incorporates a very high level of mechanical de-coupling of the input and output. However, it can still be influenced by acoustical feedback in the operating environment. The use of acoustic cones or a suitably spiked preamplifier stand or table, may further enhance the performance of this preamplifier. Consult your **PLINIUS** dealer for further advice if required.

MAINS VOLTAGE CONNECTION

Firstly, check that the mains supply voltage printed on the rear of this preamplifier is similar to the mains supply voltage in your area. If in doubt, please consult your **PLINIUS** dealer.

Mains supply power connection is via the supplied plug-in lead. A standard IEC socket connects the mains power at the preamplifier end, while a local mains plug is required at the wall end.

The wiring code used inside all Plinius product is:

Green to Earth/Ground
Blue to Neutral
Brown to Phase/Live

Should a 'local' plug need fitting to the wall end of the lead, ensure that a suitably qualified service technician wires the plug correctly.

IMPORTANT: **DO NOT POWER UP YOUR PREAMPLIFIER UNTIL YOU HAVE CONNECTED YOUR INPUT/OUTPUTS CORRECTLY FOR YOUR SYSTEM, (AS EXPLAINED IN THE NEXT SECTION).**

INPUT / OUTPUT CONNECTION

It is important that you connect your power amplifier/s (outputs) and source components (inputs) to your Plinius M8 Preamplifier correctly to ensure the preamplifier is not damaged, and sounds its best within your system. Now that you have read and familiarised yourself with the various connections on the preamplifier, as covered in previous sections, we will describe in detail how to connect the preamplifier to your system.

Connect your CD player, tuner, tape deck, etc, to the CD, Line1, Line 2, Line 3 or Line 4 RCA inputs on the back of the Plinius M8. Make sure you connect the red coded cable to the red RIGHT RCA input, and the black (or white) cable to the black LEFT RCA input. Also make sure the RCA connectors are a snug fit and are inserted all the way in. If you are using balanced XLR cables note that only the CD input caters for this type of connection. You will also need to use the settings menu and set the CD input to balanced (see Settings Menu Structure following).

Next, connect your power amplifier/s cables to the output sockets. Ensure that you observe polarity on all cables (red is right, black is left) to ensure correct channel phasing.

TERMINATION QUALITY

Quality of the connections must be examined to ensure that high-performance, trouble-free operation is enjoyed. Check that all interconnection cables are snug fitting and inserted all the way in. In the case of balanced XLR sockets, ensure that they click in positively.

PHASING (OR POLARITY)

It is important to achieve good stereo imaging in your listening room. By observing the wiring instructions above, each preamplifier/power amplifier/loudspeaker combination should be in phase. If you experience poor stereo image and/or a lack of bass, check that all interconnection cables and loudspeaker wires have been connected correctly. We recommend that you use one of the easily obtainable 'test discs' to help you ensure both phasing and channel orientation are correct. If in doubt, consult your **PLINIUS** dealer for advice.

Naturally it is also important to make sure all the leads carrying signals for the RIGHT channel loudspeaker are connected to the RIGHT input to the amplifier from your preamplifier or CD player etc. Signals for the LEFT channel should be wired in a similar fashion.

CONNECTING THE MAINS SUPPLY

Now that your Plinius M8 Preamplifier is configured to your system correctly, the mains cable can be plugged into the IEC socket on the back of the preamplifier. Re-check all interconnection cables are fitted correctly. Turn on the power switch on the rear panel. The vacuum fluorescent display will now display the messages 'PLINIUS', 'M8', 'SERIAL NO XXXX', while the internal circuitry stabilises. The preamplifier will then close the mute circuit and set the active input to CD.

USING THE PROCESSOR INPUT

By connecting two of the channel outputs of a home theatre processor to the M8 processor input terminals, the M8 becomes a straight-through path for any signal that is connected to it. This enables the M8 to remain in circuit for use with two channel sources (such as CD players and tuners), as well as a link to the power amp and speakers should you wish to use your normal stereo set-up in a surround or home theatre environment.

To access the processor input, press the Processor button on the remote control. To deselect the processor input and return to using CD, Line 1, etc. as a source, press the source button you wish to listen to. Note that when processor is selected, no other buttons or menu settings can be accessed, except standby and display.

ENABLING THE INPUTS/OUTPUTS

Use the source buttons to select the input you want to listen to. Press the Mute button, then alter the volume to achieve the sound level you require. The Phase button can be used to select absolute or inverted 180° phase. If you wish to alter other settings such as CD input type, balance, or display brightness, see the following section. You can now enjoy your new Plinius M8 Preamplifier.

WARM-UP PERIOD

You will find that the Plinius M8 will become noticeably 'purer' in sound after being on for a period of time. We usually recommend waiting at least 24 hours before expecting the best quality of sound reproduction from your preamplifier. Also, as the Plinius M8 uses very little power while on, we suggest leaving the unit turned on (but in standby mode while not being used) so that it will always be at it's sonic best.

SETTINGS MENU STRUCTURE

A major feature of your Plinius M8 Preamplifier is the settings menu. Options such as balance, display brightness and CD input type are all configured via this menu.

USING THE SETTINGS MENU

After pressing the Menu button on the remote, the settings menu can be accessed. The Down and Up buttons can then be used to scroll through the following sub-menus:

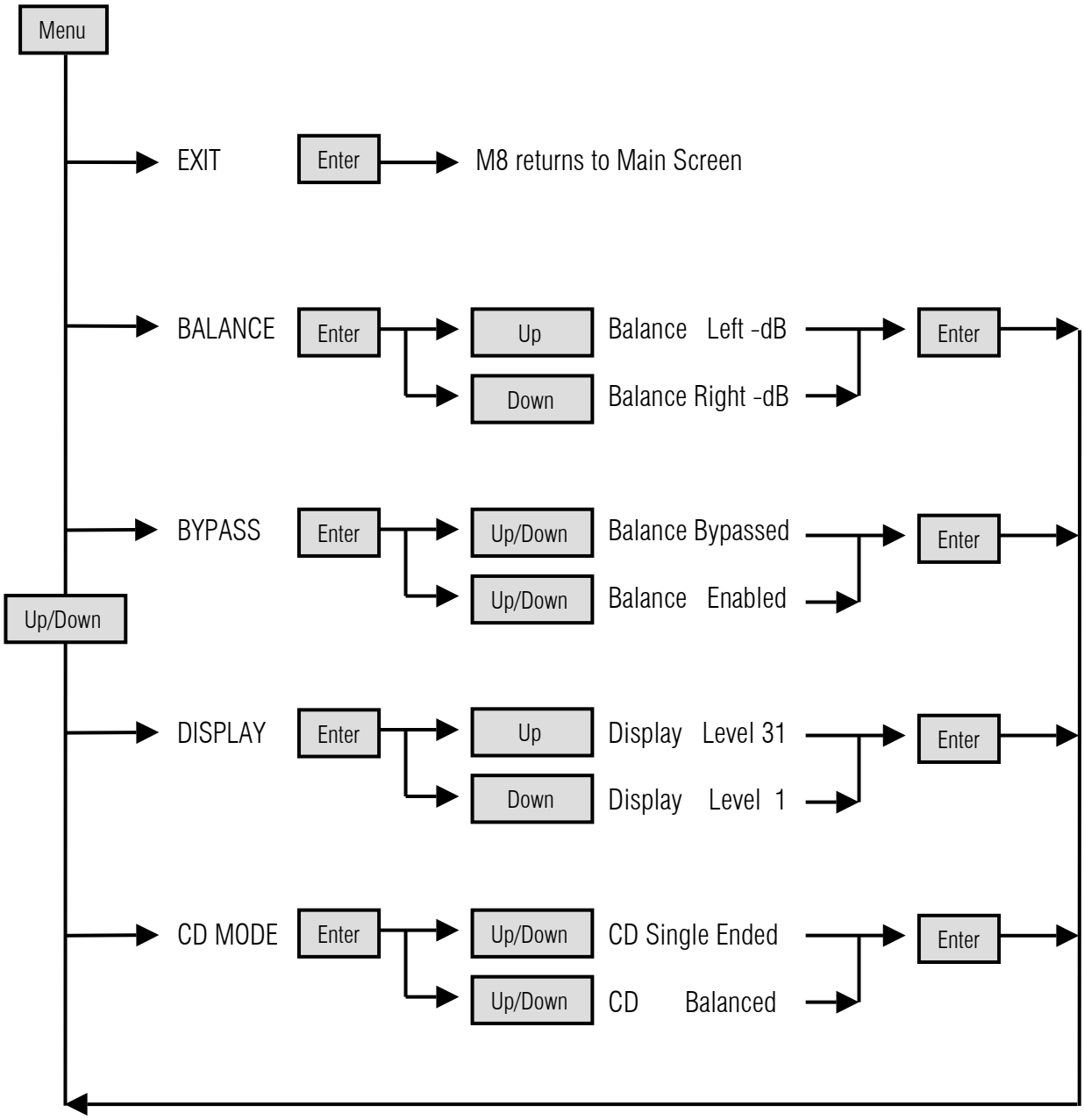
Balance
Bypass
Display
CD Mode

To enter any sub-menu listed above, press the Enter button. Adjust the settings of the sub-menu chosen using the Down and Up buttons and when finished press Enter to return to the main display. The diagram following is a visual reference of this system, and each sub-menu is described in detail below.

MEMORY STORAGE OF SETTINGS

The settings that you access below are all stored in the memory of the M8 microcontroller. Next time you turn on the preamplifier, any settings you have changed (balance level, CD input type, display brightness etc.) will be enabled in that same configuration.

SETTINGS MENU DIAGRAM



Denotes a button press

Up or Down can be held down to perform repetitive key presses
Press and hold Up and Down together within Balance sub-menu to return to centre position
After 15 seconds of inactivity in any sub-menu the preamplifier will return to the Main Screen
If the preamplifier does auto exit the menu system, your settings are not saved

EXIT SUB-MENU

When 'Exit' appears on the display, press Enter to return the preamplifier to the main screen from the settings menu.

BALANCE SUB-MENU

Press Enter and you can now use the Down and Up buttons to vary the signal between the right and left channels. Note that if you depress the Up button the signal to the left channel is reduced as denoted by the screen message. The opposite applies when using the Down button. Pressing and holding both Down and Up buttons will return the balance level to centre. Holding either Down or Up will enable fast scrolling through the balance levels. Use Enter to exit this sub-menu. You can also remove the balance control circuitry from the signal path by using the Bypass sub-menu explained below.

BYPASS SUB-MENU

To remove the balance control press Enter and use Down or Up to toggle the balance circuitry on or off. Press Enter once your selection has been made to exit the sub-menu.

DISPLAY SUB-MENU

Press Enter and the display sub-menu will allow you to vary the display brightness to suit the lighting in your room. Use Down or Up to vary the brightness from 1 to 31 (31 being the brightest). Once a suitable brightness level has been achieved, press Enter to return to the main display. Note that as with the balance control you may hold Up or Down to quickly scroll through the brightness levels. Should you choose a brightness level below 5 and turn off the M8, the preamplifier will power up again at 5 to ensure you can always restart your preamplifier and change settings should you accidentally set the brightness too low to read.

CD MODE SUB-MENU

If you wish to change CD input from single ended (RCA) to balanced (XLR) press Enter to access the CD mode sub-menu, then Down or Up to toggle between the two options. Press Enter once your selection has been made to exit the sub-menu.

M8 FEATURES

REMOTE CONTROL

Provided with your Plinius M8 is a 15 function remote control. Two AAA batteries power the remote, and these are replaced by removing the two posi-drive screws on the rear face of the remote that hold the battery compartment in place. The bottom end of the remote is now free to slide down for access to the batteries. Replace the two batteries, taking care to refit the new ones with correct polarity.

MAINS/LINE FUSE

A Mains/Line fuse is fitted within the IEC socket on the rear of the preamplifier. A small drawer at the bottom of this socket may be removed (after the IEC plug is removed) by levering it out with a flat blade screwdriver. The fuse fitted should be rated at no greater than 5 amps normal blow.

IMPORTANT: DO NOT FIT A FUSE WITH A HIGHER RATING.

In the unusual event that this fuse should blow, you must first establish the cause of this failure (such as power surges, damaged mains cable, etc.) before replacing the fuse with one of the same rating and type. Should the preamplifier continue to suffer mains fuse failure, contact your **PLINIUS** dealer.

SPECIFICATIONS

- **FREQUENCY RESPONSE:** 20Hz to 20kHz ±0.2dB.
- **DISTORTION**: Typically <0.05% THD at rated input level.
- **HUM & NOISE:** -80dB at rated input level, A Weighted.
- **INPUT SENSITIVITY FOR RATED OUTPUT:** 125mV RMS unbalanced inputs. 62mV RMS balanced input.
- **INPUT IMPEDANCE:** 50kΩ.
- **RATED OUTPUT LEVEL:** 500mV RMS into 10kΩ or higher.
- **OUTPUT SOURCE IMPEDANCE:** Typically 100Ω.
- **HEIGHT:** 90mm (3 1/2")
- **WIDTH:** 450mm (17 3/4")
- **DEPTH:** 400mm (15 3/4")
- **WEIGHT:** 5.5kg (12lbs)

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